1, ~~20~~. (New) A method for inducing apoptosis in a cell selected from the group consisting of a leukemic cell, a prostate cancer cell, a pancreatic cancer cell, a squamous cell carcinoma cell, a breast carcinoma cell, a melanoma cell, a basal cell carcinoma cell, a neuroblastoma cell, a glioblastoma multiforme cell, a myeloid leukemic cell, a colon carcinoma cell, an endometrial carcinoma cell, a lung carcinoma cell, an ovarian carcinoma cell, a cervical carcinoma cell, an osteosarcoma cell and a lymphoma cell, which method comprises contacting the cell with

(a) an effective amount of paclitaxel, and

(b) an effective amount of C_6-ceramide, sequentially or concomitantly,

wherein the resulting apoptosis is greater than the apoptosis caused by contacting the cell with either paclitaxel alone or C_6-ceramide alone, thereby increasing apoptosis in the cell.

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2. ~~21~~. (New) The method of claim ~~20~~ 1, wherein the cell is first contacted with paclitaxel and subsequently contacted with C_6-ceramide.

3. ~~22~~. (New) The method of claim ~~20~~ 1, wherein the cell is present in a subject.

5. ~~23~~. (New) The method of claim ~~20~~ 1, wherein the contacting with paclitaxel is effected by cremophore delivery or liposome-mediated delivery, and the contacting with C_6-ceramide is effected by cremophore delivery, alcohol-mediated delivery or liposome-mediated delivery.

4. ~~24~~. (New) The method of claim ~~22~~ 3, wherein the contacting with

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paclitaxel and with C_6-ceramide is effected by an administration route selected from the group consisting of intravenous, intraperitoneal, intrathecal, intralymphatic, intramuscular, intralesional, parenteral, epidural, subcutaneous, pleural, topical, oral, nasal, anal, ocular and otic.

6, ~~25.~~ (New) A method of decreasing the size of a tumor, wherein the tumor comprises cells selected from the group consisting of leukemic cells, prostate cancer cells, pancreatic cancer cells, squamous cell carcinoma cells, breast carcinoma cells, melanoma cells, basal cell carcinoma cells, neuroblastoma cells, glioblastoma multiforme cells, myeloid leukemic cells, colon carcinoma cells, endometrial carcinoma cells, lung carcinoma cells, ovarian carcinoma cells, cervical carcinoma cells, osteosarcoma cells and lymphoma cells, which method comprises contacting the tumor with

(a) an effective amount of paclitaxel, and

(b) an effective amount of C_6-ceramide, sequentially or concomitantly,

wherein the resulting decrease in size of the tumor is greater than the decrease in size caused by contacting the tumor with either paclitaxel alone or C_6-ceramide alone, thereby decreasing the size of the tumor.

C' cont

7. ~~26.~~ (New) The method of claim ~~25,~~ 6 wherein the tumor is first contacted with paclitaxel and subsequently contacted with C_6-ceramide.

8. 27. (New) The method of claim ~~25,~~ 6 wherein the tumor is present in a subject.

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~~28.~~ 10. (New) The method of claim ~~25~~ 6, wherein the contacting with paclitaxel is effected by cremophore delivery or liposome-mediated delivery, and the contacting with C_6-ceramide is effected by cremophore delivery, alcohol-mediated delivery or liposome-mediated delivery.

~~29.~~ 9. (New) The method of claim ~~27~~ 8, wherein the contacting with paclitaxel and with C_6-ceramide is effected by an administration route selected from the group consisting of intravenous, intraperitoneal, intrathecal, intralymphatic, intramuscular, intralesional, parenteral, epidural, subcutaneous, pleural, topical, oral, nasal, anal, ocular and otic.

C' cont ~~30.~~ 11. (New) A pharmaceutical composition comprising paclitaxel, C_6-ceramide and a pharmaceutically acceptable carrier, wherein the composition causes apoptosis in a cell selected from the group consisting of a leukemic cell, a prostate cancer cell, a pancreatic cancer cell, a squamous cell carcinoma cell, a breast carcinoma cell, a melanoma cell, a basal cell carcinoma cell, a neuroblastoma cell, a glioblastoma multiforme cell, a myeloid leukemic cell, a colon carcinoma cell, an endometrial carcinoma cell, a lung carcinoma cell, an ovarian carcinoma cell, a cervical carcinoma cell, an osteosarcoma cell and a lymphoma cell.

Jms D' 5D

~~31.~~ 12. (New) A method for treating a subject afflicted with cancer selected from the group consisting of leukemia, prostate cancer, pancreatic cancer, squamous cell cancer, breast cancer, melanoma, basal cell carcinoma, neuroblastoma, glioblastoma,

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